6560-50-P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 52

[EPA-R09-OAR-2014-0647, FRL-9916-85-Region 9]

Approval and Promulgation of Air Quality Implementation Plans; Arizona; Regional Haze State and Federal Implementation Plans; Reconsideration

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed rule.

SUMMARY: The Environmental Protection Agency (EPA) is proposing to approve a source-specific revision to the Arizona State Implementation Plan (SIP) that establishes an alternative to best available retrofit technology (BART) for Steam Units 2 and 3 (ST2 and ST3) at Arizona Electric Power Cooperative's (AEPCO) Apache Generating Station (Apache). The SIP revision also revises the emission limit for nitrogen oxides (NO_X) applicable to Steam Unit 1 (ST1), when it is operated in combined-cycle mode with Gas Turbine 1 (GT1). EPA proposes to find that the BART alternative for ST2 and ST3 would provide greater reasonable progress toward natural visibility conditions than BART, in accordance with the requirements of the Clean Air Act (CAA) and EPA's Regional Haze Rule (RHR). We also propose to approve the revision to the NO_X emission limit for ST1 and GT1. In conjunction with this proposed approval, we propose to withdraw those portions of the federal implementation plan (FIP) that address BART for Apache. We previously partially granted AEPCO's petition for reconsideration of that FIP and are now proposing to find that withdrawal of the FIP, as it applies to Apache, constitutes our action on

AEPCO's Petition for Reconsideration of the FIP.

DATES: Written comments must be submitted on or before [**Insert date 45 days from the date of publication in the Federal Register**]. Requests for public hearing must be received on or before [**Insert date 15 days from the date of publication in the Federal Register**].

ADDRESSES: See the SUPPLEMENTARY INFORMATION section for further instructions on where and how to learn more about this proposal, request a public hearing, or submit comments.

FOR FURTHER INFORMATION CONTACT: Thomas Webb, U.S. EPA, Region 9, Planning Office, Air Division, Air-2, 75 Hawthorne Street, San Francisco, CA 94105. Thomas Webb can be reached at telephone number (415) 947-4139 and via electronic mail at webb.thomas@epa.gov.

SUPPLEMENTARY INFORMATION: Throughout this document, "we," "us" and "our" refer to EPA.

Table of Contents

I. General Information

A. Definitions

For the purpose of this document, we are giving meaning to certain words or initials as follows:

- The words or initials *Act* or *CAA* mean or refer to the Clean Air Act, unless the context indicates otherwise.
- The initials *ADEQ* mean or refer to the Arizona Department of Environmental Quality.
- The initials *AEPCO* mean or refer to Arizona Electric Power Cooperative.
- The words *Arizona* and *State* mean the State of Arizona.
- The initials *BART* mean or refer to Best Available Retrofit Technology.
- The term *Class I area* refers to a mandatory Class I Federal area.[1]
- The initials *CBI* mean or refer to Confidential Business Information.
- The initials *EGU* mean or refer to Electric Generating Unit.
- The words *EPA*, *we*, *us* or *our* mean or refer to the United States Environmental Protection Agency.
- The initials *FIP* mean or refer to Federal Implementation Plan.
- The initials *GT1* mean or refer to Gas Turbine Unit 1.
- The initials *LNB* mean or refer to low-NO_X burners.
- The initials *MMBtu* mean or refer to million British thermal units
- The initials NO_X mean or refer to nitrogen oxides.
- The initials *OFA* mean or refer to over fire air.
- The initials PM_{10} mean or refer to particulate matter with an aerodynamic diameter of less than 10 micrometers.
- The initials *RHR* mean or refer to EPA's Regional Haze Rule.
- The initials *SCR* mean or refer to Selective Catalytic Reduction.
- The initials *SIP* mean or refer to State Implementation Plan.
- The initials SO_2 mean or refer to sulfur dioxide.
- The initials *ST1* mean or refer to Steam Unit 1.
- The initials *ST2* mean or refer to Steam Unit 2.
- The initials *ST3* mean or refer to Steam Unit 3.

B. Docket

The proposed action relies on documents, information, and data that are listed in the index on http://www.regulations.gov under docket number EPA-R09-OAR-2014-0647. Although listed in the index, some information is not publicly available (e.g., Confidential Business Information (CBI)). Certain other material, such as copyrighted material, is publicly available only in hard copy form. Publicly available docket materials are available either electronically at http://www.regulations.gov or in hard copy at the Planning Office of the Air Division, AIR-2, EPA Region 9, 75 Hawthorne Street, San Francisco, CA 94105. EPA requests that you contact the

[1] Although states and tribes may designate as Class I additional areas which they consider to have visibility as an important value, the requirements of the visibility program set forth in section 169A of the CAA apply only to "mandatory Class I Federal areas."

individual listed in the FOR FURTHER INFORMATION CONTACT section to view the hard copy of the docket. You may view the hard copy of the docket Monday through Friday, 9-5:00 PDT, excluding Federal holidays.

C. Instructions for Submitting Comments to EPA

Written comments must be submitted on or before [**Insert date 45 days from the date of publication in the Federal Register**]. Submit your comments, identified by Docket ID No. EPA-R09-OAR-2014-0647, by one of the following methods:

- Federal Rulemaking portal: http://www.regulations.gov. Follow the on-line instructions for submitting comments.
- Email: webb.thomas@epa.gov .
- Fax: 415-947-3579 (Attention: Thomas Webb).
- Mail, Hand Delivery or Courier: Thomas Webb, EPA Region 9, Air Division (AIR-2), 75 Hawthorne Street, San Francisco, California 94105. Hand and courier deliveries are only accepted Monday through Friday, 8:30 a.m.-4:30 p.m., excluding Federal holidays. Special arrangements should be made for deliveries of boxed information.

EPA's policy is to include all comments received in the public docket without change. We may make comments available online at http://www.regulations.gov, including any personal information provided, unless the comment includes information claimed to be CBI or other information for which disclosure is restricted by statute. Do not submit information that you consider to be CBI or that is otherwise protected through http://www.regulations.gov or email. The http://www.regulations.gov Web site is an "anonymous access" system, which means EPA will not know your identity or contact information unless you provide it in the body of your comment. If you send an email comment directly to EPA, without going through http://www.regulations.gov, we will include your email address as part of the comment that is placed in the public docket and made available on the Internet. If you submit an electronic comment, EPA recommends that you include your name and other contact information in the body of your comment and with any disk

or CD-ROM you submit. If EPA cannot read your comment due to technical difficulties and cannot contact you for clarification, EPA may not be able to consider your comment. Electronic files should not include special characters or any form of encryption, and be free of any defects or viruses.

D. Submitting Confidential Business Information

Do not submit CBI to EPA through http://www.regulations.gov or by email. Clearly mark the part or all of the information that you claim as CBI. For CBI information in a disk or CD-ROM that you mail to EPA, mark the outside of the disk or CD-ROM as CBI and identify electronically within the disk or CD-ROM the specific information that is claimed as CBI. In addition to one complete version of the comment that includes information claimed as CBI, you must submit a copy of the comment that does not contain the information claimed as CBI for inclusion in the public docket. We will not disclose information so marked except in accordance with procedures set forth in 40 CFR part 2.

E. Tips for Preparing Your Comments

When submitting comments, remember to:

- Identify the rulemaking by docket number and other identifying information (e.g., subject heading, Federal Register date and page number).
- Explain why you agree or disagree; suggest alternatives and substitute language for your requested changes.
- Describe any assumptions and provide any technical information and/or data that you used.
- If you estimate potential costs or burdens, explain how you arrived at your estimate in sufficient detail to allow for it to be reproduced.
- Provide specific examples to illustrate your concerns, and suggest alternatives.
- Explain your views as clearly as possible, avoiding the use of profanity or personal threats.
- Make sure to submit your comments by the identified comment period deadline.

F. Public Hearings

If anyone contacts EPA by [**Insert date 15 days from publication in the Federal**

Register] requesting to speak at a public hearing, EPA will schedule a public hearing and announce the hearing in the Federal Register. Contact Thomas Webb at (415) 947-4139 or at webb.thomas@epa.gov to request a hearing or to determine if a hearing will be held.

II. Background

A. Statutory and Regulatory Background

This section provides a brief overview of the requirements of the CAA and RHR, as they apply to this particular action. Please refer to our previous rulemakings on the Arizona Regional Haze SIP for additional background regarding the visibility protection provisions of the CAA and the RHR.[2]

In section 169A of the 1977 Amendments to the CAA, Congress created a program for protecting visibility in the nation's national parks and wilderness areas. This section of the CAA establishes as a national goal the "prevention of any future, and the remedying of any existing, impairment of visibility in mandatory Class I Federal areas which impairment results from manmade air pollution."[3] It also directs states to evaluate the use of retrofit controls at certain larger, often uncontrolled, older stationary sources in order to address visibility impacts from these sources. Specifically, section 169A(b)(2)(A) of the CAA requires states to revise their SIPs to contain such measures as may be necessary to make reasonable progress towards the natural visibility goal, including a requirement that certain categories of existing major stationary sources built between 1962 and 1977 (known as "BART-eligible" sources) procure, install, and operate BART. In the 1990 CAA Amendments, Congress amended the visibility provisions in the CAA to

[2] 77 FR 42834, 42837-42839 (July 20, 2012), (Arizona Regional Haze "Phase 1" Rule) 77 FR 75704, 75709-75712 (December 21, 2012), (Arizona Regional Haze "Phase 2" Rule).
[3] 42 U.S.C. 7491(a)(1).

focus attention on the problem of regional haze, which is visibility impairment produced by a multitude of sources and activities located across a broad geographic area.[4]

In 1999, we promulgated the RHR, which requires states to develop and implement SIPs to ensure reasonable progress toward improving visibility in mandatory Class I Federal areas (Class I areas)[5] by reducing emissions that cause or contribute to regional haze.[6] Under the RHR, states are directed to conduct BART determinations for BART-eligible sources that may be anticipated to cause or contribute to any visibility impairment in a Class I area.[7] In lieu of requiring source-specific BART controls, states also have the flexibility to adopt alternative measures, as long as the alternative provides greater reasonable progress towards natural visibility conditions than BART (i.e., the alternative must be "better than BART").[8]

B. Summary of State Submittals and EPA Actions

1. 2011 Arizona RH SIP

On February 28, 2011, the Arizona Department of Environmental Quality (ADEQ) submitted a Regional Haze SIP under Section 308 of the RHR ("Arizona RH SIP") to EPA. This submittal included BART determinations for nitrogen oxides (NO_X), particulate matter with an aerodynamic diameter of less than 10 micrometers (PM_{10}), and sulfur dioxide (SO_2) at Apache Units ST1, ST2, and ST3. Unit ST1 is a wall-fired boiler with a net unit output of 85 MW that burns pipeline-quality natural gas as its primary fuel. Units ST2 and ST3 are both dry-bottom, Riley Stoker turbo-fired boilers, operating on sub-bituminous coal, each with a gross unit output of

[4] See CAA section 169B, 42 U.S.C. 7492.
[5] Areas designated as mandatory Class I Federal areas consist of national parks exceeding 6000 acres, wilderness areas and national memorial parks exceeding 5000 acres, and all international parks that were in existence on August 7, 1977. 42 U.S.C. 7472(a). When we use the term "Class I area" in this action, we mean a "mandatory Class I Federal area."
[6] See generally 40 CFR 51.308.
[7] 40 CFR 51.308(e).
[8] 40 CFR 51.308(e)(2).

204 MW.

2. 2012 EPA Action on Arizona RH SIP and FIP

On December 5, 2012, we issued a final rule approving in part and disapproving in part ADEQ's BART determinations for three sources, including Apache.[9] In particular, we approved ADEQ's BART determinations for NO_X, PM_{10}, and SO_2 at Apache ST1 and PM_{10} and SO_2 at ST2 and ST3, but disapproved ADEQ's BART determinations for NO_X at ST2 and ST3. We also found that the SIP lacked enforceable emission limits for all units and pollutants. In the same action, we promulgated a FIP for the disapproved portions of the SIP, including NO_X BART determinations for ST2 and ST3. We determined that BART for NO_X at ST2 and ST3 was an emission limit of 0.070 pounds per million British thermal units (lb/MMBtu) determined as an average across the two units, based on a rolling 30-boiler-operating-day average, which is achievable with the use of low-NO_X burners (LNB), overfire air (OFA) and selective catalytic reduction (SCR). We also established compliance dates and requirements for equipment maintenance, monitoring, recordkeeping, and reporting for all units and all pollutants.

3. 2013 AEPCO Petition for Reconsideration of RH FIP for Apache Generating Station

On February 4, 2013, AEPCO submitted a petition to EPA seeking reconsideration of the final rule ("AEPCO Petition").[10] On May 29, 2013, AEPCO submitted a supplemental petition providing an alternative to the BART determinations in that rule ("Apache BART Alternative").[11] The Apache BART Alternative consisted of a conversion to pipeline natural gas (PNG) combustion at ST2 and a NO_X emission limit based upon selective non-catalytic reduction (SNCR) at ST3. On June 6, 2013, we sent a letter to representatives of AEPCO granting partial

[9] 77 FR 72512.
[10] Letter from Eric Hiser, Jorden, Bischoff and Hiser, to Lisa Jackson, EPA (February 2, 2013).
[11] Letter from Eric Hiser, Jorden, Bischoff and Hiser, to Robert Perciasepe and Jared Blumenfeld, EPA (May 29, 2013).

reconsideration of the final rule under CAA section 307(d)(7)(B).[12] Specifically, we stated that we were granting reconsideration of the emission limits for NO_X, PM_{10}, and SO_2 at ST2 and ST3, the compliance methodology for NO_X at ST2 and ST3, and the provisions of the rule applicable to ST1 and GT1.

4. 2013 Arizona RH SIP Revision and Clarification

On May 3, 2013, ADEQ submitted a revision to the Arizona RH SIP.[13] Among other things, the SIP revision clarified that the BART emission limits for ST1 apply when ST1 operates alone or if ST1 is operated in combined-cycle mode with the adjacent GT1, but not to (a) GT1 in stand-alone simple-cycle operation or (b) ST1/GT1 when ST1 burners are shut off and ST1 is not producing electricity.[14] EPA approved this clarification in our July 30, 2013 Phase 2 final rule on the Arizona RH SIP.[15]

5. 2014 Arizona RH SIP Revision for Apache Generating Station

On May 13, 2014, ADEQ submitted a revision to the Arizona RH SIP that incorporated the Apache BART Alternative ("Apache SIP Revision").[16] The Apache SIP Revision also revised the NO_X emission limit for ST1 during combined-cycle operation. The Apache SIP Revision is the subject of this proposal.

III. The Apache SIP Revision

[12] Letter from Jared Blumenfeld, EPA, to Eric Hiser, Jorden, Bischoff and Hiser (June 6, 2013).
[13] Letter from Eric Massey, ADEQ, to Jared Blumenfeld, EPA (May 3, 2013), Enclosure 3, Arizona RH SIP Revision.
[14] Id. Appendix D, pages 5-6 (footnotes to tables 1.1, 1.2 and 1.3) and page 49. The reason for this distinction is that gas turbines are not among the 26 industrial source categories included in the definition of "existing stationary facility" in the Regional Haze Rule, whereas combined cycle turbines are included in this list. See 40 CFR 51.301; 40 CFR part 51 appendix Y, section II.A.1.
[15] See Supplemental Proposal, 78 FR 46142, 46175 (codified at 40 CFR 52.120(c)(158)(ii)(A)(*1*)(*iii*)).
[16] Letter from Eric Massey, ADEQ, to Jared Blumenfeld, EPA (May 13, 2014), Enclosure 3, Revision to the Arizona RH Plan for AEPCO Apache Generating Station.

A. Summary of the Apache SIP Revision

The Apache SIP Revision consists of two components: a BART Alternative for ST2 and ST3, and a revised NO_X emission limit for ST1 and GT1 when operated in combined-cycle mode.

1. Apache BART Alternative

Under the Apache BART Alternative, ST2 would be converted from a primarily coal-fired unit to a unit that combusts pipeline-quality natural gas, while ST3 would remain as a coal-fired unit and would be retrofitted with SNCR. The emission limits associated with the Alternative are summarized in Table 1. The compliance date for all limits is December 5, 2017, except that a more stringent limit for PM_{10} at ST2 (0.008 lb/MMBtu) that will be effective on December 5, 2018.

TABLE 1 – EMISSION LIMITS FOR APACHE BART ALTERNATIVE

	Emission Limit (lb/MMbtu, averaged over 30 boiler-operating days)		
Unit	NO_X	PM_{10}	SO_2
ST2	0.085	0.01, then 0.008 (effective December 5, 2018)	0.00064
ST3	0.23	0.03	0.15

ADEQ incorporated the revised emission limits, as well as associated compliance deadlines and monitoring, recordkeeping, and reporting requirements, as an addendum to Apache's Operating Permit, which was submitted as part of the Apache SIP Revision.[17] The SIP revision also includes ADEQ's determination that the Apache BART Alternative is "better than BART," based on total estimated emissions reductions, reductions in visibility impairing pollutants, IMPROVE monitoring data, and improvements in modeled visibility impacts from

[17] Apache SIP Revision, Appendix B, Significant Revision No. 59195 to Air Quality Control Permit No. 55412 ("Apache Permit Revision")(issued May 13, 2014).

Apache.[18] More information regarding ADEQ's analysis is set forth below, along with EPA's evaluation of the analysis. On July 18, 2014, EPA determined that the Apache SIP Revision was complete under CAA section 110(k)(1)(B).[19]

2. Revised Emission Limit for ST1 and GT1

The Apache SIP Revision revises the NO_X emission limit for the combined-cycle operation of ST1 with GT1 from 0.056 lb/MMBtu to 0.10 lb/MMBtu, based on a determination that the 0.056 lb/MMBtu limit is not achievable during combined cycle operations and that inclusion of emissions from GT1 would result in an emission rate of 0.10 lb/MMbtu.[20] In order to ensure that this revision does not result in an overall increase in NO_X emissions, the SIP Revision also sets a 1205 lb/day limit, based on a 30-calendar-day average, for ST1 operating in standalone mode or in combined-cycle mode with GT1. ADEQ derived this emission limit based on the existing emission limit of 0.056 lb/MMBtu (the original NO_X emission limit required for ST1 and GT1 in combined-cycle mode), and a conservative estimate of the heat rate (10,985 Btu/kWhr) over the primary operating range of ST1 and GT1 in combined-cycle operation.[21]

B. EPA's Evaluation of Apache BART Alternative.

The RHR requires that a SIP revision establishing a BART alternative include three elements as listed below. We have evaluated the Apache BART Alternative with respect to each of these elements.

- A demonstration that the emissions trading program or other alternative measure will achieve greater reasonable progress than would have resulted from the installation and operation of BART at all sources subject to BART in the State and covered by the alternative program.[22]
- A requirement that all necessary emissions reductions take place during the period of the first long-term

[18] Apache SIP Revision, sections 2.2 and 2.3.
[19] Letter from Deborah Jordan, EPA, to Eric Massey, ADEQ (July 18, 2014).
[20] See letter from Eric Hiser, Jorden, Bischoff and Hiser, to Eric Massey, ADEQ (November 25, 2013).
[21] Id. section 3.1, footnote 9.
[22] 40 CFR 51.308(e)(2)(i).

strategy for regional haze.[23]

- A demonstration that the emissions reductions resulting from the alternative measure will be surplus to those reductions resulting from measures adopted to meet requirements of the CAA as of the baseline date of the SIP.[24]

1. Demonstration of the alternative measure will achieve greater reasonable progress

Pursuant to 40 CFR 51.308(e)(2)(i), ADEQ must demonstrate that the alternative measure will achieve greater reasonable progress than would have resulted from the installation and operation of BART at all sources subject to BART in the State and covered by the alternative program. This demonstration must be based on five criteria, which are addressed below.

a. A list of all BART-eligible sources within the State

Pursuant to 40 CFR 51.308(e)(2)(i)(A), the SIP must include a list of all BART-eligible sources within the State. ADEQ included a list of BART-eligible sources in the Arizona RH SIP.[25] As part of the Phase 2 Arizona regional haze rulemaking, EPA approved the majority of ADEQ's BART-eligibility determinations, but disapproved ADEQ's finding that Tucson Electric Power (TEP) Sundt Unit 4 was not BART-eligible.[26] In the Phase 3 Arizona regional haze rulemaking, EPA determined that TEP Sundt Unit 4 was BART-eligible and subject-to-BART and made final BART determinations for this unit.[27] Thus, all BART-eligible sources in the State have been addressed either in a SIP or FIP. We propose to find that the existing Arizona RH SIP and FIP fulfill the requirement of 40 CFR 51.308(e)(2)(i)(A) for a list of all BART-eligible sources within the State.

b. A list of all BART-eligible sources and all BART source categories covered by the alternative program.

[23] 40 CFR 51.308(e)(2)(iii).
[24] 40 CFR 51.308(e)(2)(iv).
[25] See 77 FR 75704, 75719-75720; 78 FR 46142, 46151-46152.
[26] Id.
[27] 79 FR 52420.

Pursuant to 40 CFR 51.308(e)(2)(i)(B), each BART-eligible source in the State must be subject to the requirements of the alternative program or have a federally enforceable emission limitation determined by the State and approved by EPA as meeting BART. In this instance, the alternative program covers only Apache ST2 and ST3. All other BART-eligible sources and units in the State have already been addressed in the Arizona RH SIP and FIP.[28] Therefore, we propose to find that the Apache SIP Revision meets the requirement of 40 CFR 51.308(e)(2)(i)(B).

c. Analysis of BART and associated emission reductions

Pursuant to 40 CFR 51.308(e)(2)(i)(C), the SIP must include an analysis of BART and associated emission reductions at ST2 and ST3. As noted above, ADEQ's BART analyses and determinations for ST2 and ST3 were included in the Arizona RH SIP. EPA approved ADEQ's BART determinations for PM_{10} and SO_2, but disapproved ADEQ's BART determination for NO_X at ST2 and ST3 and conducted our own BART analysis and determination for NO_X BART for ST2 and ST3 in a FIP.

In the Apache SIP Revision, ADEQ compared the BART Alternative both to ADEQ's original BART determinations and to EPA's BART determinations in the FIP. For purposes of our evaluation, we consider BART for ST2 and ST3 to consist of a combination of (1) ADEQ's BART determinations for PM_{10} and SO_2, which were approved into the applicable SIP, and (2) EPA's BART determination for NOx in the Arizona RH FIP. These BART determinations are summarized in Table 2.

TABLE 2 - BART EMISSION LIMITS FOR APACHE

	Emission Limit (lb/MMbtu, averaged over 30 boiler-operating days)		
Unit	NO_X	PM_{10}	SO_2

[28] See generally 77 FR 72512, 78 FR 46142.

ST2	0.070 (across two units)	0.03	0.15
ST3		0.03	0.15

In the Technical Support Document (TSD) included with the Apache SIP Revision, ADEQ calculated estimated annual emission reductions achievable with BART by comparing projected emissions from ST2 and ST3 with BART[29] to baseline emissions.[30] The results of these calculations are shown in Table 3. Because BART for PM_{10} and SO_2 was determined to be consistent with existing controls, no emission reductions are expected to result from BART. However, significant NO_X emission reductions (4,502 tpy) are expected to result from implementation of BART.

TABLE 3 – SUMMARY OF EMISSION REDUCTIONS ACHIEVABLE WITH BART AT APACHE

	ST2 and ST3 Total Emissions (tpy)		
	NO_X	PM_{10}	SO_2
Baseline ("2013 Baseline")[a]	5,441	403	2,013
BART ("2013 SCR")[b]	939	403	2,013
Emission Reduction ("2013 SCR" minus "2013 Baseline")[c]	4,502	0	0

[a] Apache SIP Revision TSD Table 6.
[b] *Id.*
[c] *Id.* Table 7.

We propose to find that ADEQ has met the requirement for an analysis of BART and associated emission reductions achievable at Apache ST2 and ST3 under 40 CFR 51.308(e)(2)(i)(C).

d. Analysis of projected emissions reductions achievable through the BART Alternative

[29] ADEQ refers to the BART control scenario as "2013 SCR." See TSD page 4 ("This scenario assumes SCR, LNB, and OFA implementation as well as ESP and wet scrubber upgrades.").
[30] ADEQ considered two different baseline scenarios – 2007 (assuming use of Electrostatic Precipitation (ESP) and wet scrubber upgrades) and 2013 (assuming use of OFA, ESP, and wet scrubber upgrades). See SIP TSD at 3. We have chosen to employ the 2013 Baseline, consistent with our original BART analysis, which used a baseline with OFA. See 78 FR 42856, Table 16.

In the Apache SIP Revision TSD, ADEQ calculated emissions reductions achievable through the BART Alternative by comparing estimated annual emissions from ST2 and ST3 under the BART Alternative[31] with baseline emissions. The results of these calculations are shown in Table 4.

TABLE 4 – SUMMARY OF EMISSION REDUCTIONS ACHIEVABLE WITH APACHE BART ALTERNATIVE

	ST2 and ST3 Total Emissions (tpy)		
	NO_X	PM_{10}	SO_2
Baseline ("2013 Baseline")[a]	5,441	403	2,013
BART Alternative ("2013 9bv2 PNGt")[b]	2,122	262	1,056
Emission Reduction ("2013 9bv2 PNGt" minus "2013 Baseline")[c]	3,318	141	957

[a] Apache SIP Revision TSD Table 6.
[b] *Id.*
[c] *Id.* Table 7.

We propose to find that ADEQ has met the requirement for an analysis of the projected emissions reductions achievable through the alternative measure under 40 CFR 51.308(e)(2)(i)(D).

e. A determination that the alternative achieves greater reasonable progress than would be achieved through the installation and operation of BART.

Pursuant to 40 CFR 51.308(e)(2)(i)(E), the State must provide a determination that the alternative achieves greater reasonable progress than BART under 40 CFR 51.308(e)(3) or otherwise based on the clear weight of evidence. 40 CFR 51.308(e)(3), in turn, provides two different tests for determining whether the alternative achieves greater reasonable progress than BART. If the distribution of emissions is not substantially different than under BART, and the

[31] ADEQ refers to the BART Alternative as "2013 9bv2 PNGt." See TSD page 4 ("The 2013 9bv2 PNGt scenario reflects the implementation of the AEPCO alternative controls . . .").

alternative measure results in greater emission reductions, then the alternative measure may be deemed to achieve greater reasonable progress. If the distribution of emissions is significantly different, however, then the State must conduct dispersion modeling to determine differences in visibility between BART and the trading program for each impacted Class I area, for the worst and best 20 percent of days. The modeling would demonstrate "greater reasonable progress" if both of the following two criteria are met: (1) visibility does not decline in any Class I area, and; (2) there is an overall improvement in visibility, determined by comparing the average differences between BART and the alternative over all affected Class I areas.

In the Apache SIP Revision, ADEQ determined that neither of the two tests under 51.308(e)(3) was appropriate for evaluating the Apache BART Alternative. Therefore, ADEQ conducted a weight-of-evidence analysis based on reductions in visibility-impairing pollutants, IMPROVE monitoring data, and improvements in modeled visibility impacts from Apache.

The reductions in visibility-impairing pollutants from the Apache BART Alternative, as estimated by ADEQ, are summarized in Table 4 above. As noted above, compared with BART, ADEQ projects that the Apache BART Alternative will result in 1183 tpy more NO_X emissions, 957 tpy fewer SO_2 emissions, and 141 tpy fewer PM_{10} emissions than BART.

ADEQ next considered historical emission inventory and ambient monitoring data. In particular, ADEQ noted that, in 2008, state-wide emissions of SO_2 (84,784 tons) were less than a third of state-wide NO_X emissions (290,344 tons). ADEQ also reviewed ambient monitoring data from Class I areas impacted by emissions from Apache and found that visibility impairment due to SO_2 was more than three times greater than impairment from NO_X.[32] Based on the monitoring and emission inventory data, ADEQ concluded that, "for the State of Arizona, it is likely more beneficial to reduce SO_2 emissions as compared to NO_X emissions when applying pollution

[32] Apache SIP Revision page 5.

controls to point sources to improve class I area visibility. Therefore, ADEQ believes AEPCO's proposed alternative control methodology would realize higher real-world visibility benefits than the other control methods tested."[33]

Finally, ADEQ considered the results of air quality modeling (using the CALPUFF model) performed by AEPCO to assess the visibility impacts of Apache under various control scenarios.[34] These results, summarized in Table 5, show that, compared with BART, the Apache BART Alternative would result in greater visibility improvement at all but two areas (Gila Wilderness Area and Mount Baldy Wilderness Area), and would result in greater improvement on average across all areas. In addition, implementation of the Apache BART Alternative would result in improvement at all affected Class I areas, in comparison to the base case.

TABLE 5 - MODELED VISIBILITY IMPACTS OF APACHE

	Baseline (2013 Baseline)		BART (2013 SCR)		BART Alternative (2013 9bv2 PNGt)	
	Visibility Impacts (dv)		Visibility Impacts (dv)		Visibility Impacts (dv)	
Class I Area	Avg 98th	22nd high	Avg 98th	22nd high	Avg 98th	22nd high
Chiricahua National Monument	3.328	3.409	1.978	1.996	1.882	1.909
Chiricahua Wilderness Area	3.418	3.464	1.886	1.979	1.851	1.852
Galiuro Wilderness Area	2.178	2.219	1.208	1.205	1.111	1.135
Gila Wilderness Area	0.642	0.629	0.262	0.279	0.287	0.295
Mazatzal Wilderness Area	0.266	0.277	0.156	0.147	0.126	0.124
Mt. Baldy Wilderness Area	0.269	0.282	0.109	0.114	0.112	0.116
Saguaro National Park	2.502	2.493	1.421	1.463	1.346	1.317
Sierra Ancha Wilderness Area	0.289	0.287	0.153	0.158	0.130	0.128

[33] Id. TSD page 13.
[34] Id. See also TSD pages 15-22.

Superstition Wilderness Area	0.596	0.612	0.313	0.315	0.275	0.283
Average	1.499	1.519	0.832	0.851	0.791	0.795

Notes: "Avg 98th" refers to the average of the annual 98th percentile visibility impacts in deciviews (dv) from 2001-2003. "22nd high" refers to the 22nd highest visibility impact in deciviews for combined 2001-2003 data. In all modeling scenarios, background ammonia concentrations are 1 ppb for Method 8 estimations using best 20-percent days visibility.

In evaluating ADEQ's weight-of-evidence demonstration, we have considered all elements of ADEQ's analysis, but we have given the most weight to the visibility impacts based on air quality modeling. In order to evaluate whether the Apache BART Alternative is indeed better than BART, we have applied a modified version of the two-prong modeling test set forth in 40 CFR 51.308(e)(3), using the air quality modeling results. In particular, rather than considering the best twenty-percent days and worst twenty-percent days, as provided for under 40 CFR 51.308(e)(3), we have considered the 98th percentile impacts (averaged across three years), consistent with the approach recommended by the BART Guidelines for comparing control alternatives at a single source.[35] Under the first prong of the test (the "no-degradation prong"), we compared the Apache BART Alternative to baseline conditions to ensure that the alternative will not result in worsened conditions anywhere than would otherwise exist.[36] The Apache BART Alternative clearly meets this prong, as the visibility modeling results indicated that the Alternative will result in improved visibility at all affected Class I areas compared with baseline conditions, as shown in Table 5. Under the second prong, we compared the average differences between BART and the Apache BART Alternative over all affected Class I areas to ensure that there is an overall improvement in visibility.[37] The Apache BART Alternative also meets this prong, as the modeling results

[35] 70 FR 39170. CALPUFF is the single source air quality model that is recommended in the BART Guidelines. Since CALPUFF was used for this analysis, the modeling results were post-processed in a manner consistent with the BART Guidelines.
[36] See 70 FR 39137.
[37] 40 CFR 51.308(e)(3)(ii).

indicated that the Alternative would result in improved visibility, on average, across all Class I Areas, compared with BART.

Based on the weight-of-evidence presented, we propose to approve ADEQ's determination that the Apache BART Alternative would achieve greater reasonable progress than BART under 40 CFR 51.308(e)(2)(i)(E). In particular, the BART Alternative will result in 957 tpy fewer SO_2 emissions compared to BART. In spite of more NO_x emissions (1183 tpy) compared to BART, modeling submitted by ADEQ shows that the BART Alternative will result in improved visibility at all affected Class I areas compared with baseline conditions and will result in improved visibility, on average, across all Class I Areas, compared with BART. This conclusion is further supported by the IMPROVE visibility monitoring data, which indicates that all of the affected Class I areas have more than three times the visibility impairment due to SO_2 compared to NO_x.

2. Requirement that emission reductions take place during period of first long-term strategy

Pursuant to 40 CFR 51.308(e)(2)(iii), the State must ensure that all necessary emission reductions take place during the period of the first long-term strategy for regional haze, i.e. by December 31, 2018. The RHR further provides that, to meet this requirement, the State must provide a detailed description of the alternative measure, including schedules for implementation, the emission reductions required by the program, all necessary administrative and technical procedures for implementing the program, rules for accounting and monitoring emissions, and procedures for enforcement.[38]

As noted above, the Apache SIP Revision incorporates the Apache Permit Revision, which includes conditions implementing the Apache BART Alternative. In addition to the emission limitations for NO_X, PM_{10}, and SO_2 listed in Table 1 above, the Apache Permit Revision includes

[38] 40 CFR 51.308(e)(2)(iii).

compliance dates, operation and maintenance requirements, and monitoring, recordkeeping, and reporting requirements. We propose to find that these provisions meet the requirements of 40 CFR 51.308(e)(2)(iii).

3. Demonstration that emissions reductions from alternative measure will be surplus

Pursuant to 40 CFR 51.308(e)(2)(iv), the SIP must demonstrate that the emissions reductions resulting from the alternative measure will be surplus to those reductions resulting from measures adopted to meet requirements of the CAA as of the baseline date of the SIP. The baseline date for regional haze SIPs is 2002.[39] All of the emission reductions required by the Apache BART Alternative are surplus to reductions resulting from measures applicable to Apache as of 2002. Therefore, we propose to find that the Apache BART Alternative complies with 40 CFR 51.308(e)(2)(iv).

In sum, we propose to find that the Apache BART Alternative meets all of the applicable requirements of 40 CFR 51.308(e)(2).

C. EPA's Evaluation of the ST1 Emission Limit Revision

In addition to the Apache BART Alternative, which applies to ST2 and ST3, the Apache SIP Revision includes a revision in the NO_X limit for ST1 when operating in combined-cycle mode with GT1. The SIP Revision would raise this limit from 0.056 lb/MMbtu to 0.10 lb/MMbtu based on a determination that the 0.056 lb/MMbtu limit is unachievable when ST1 is operated in combined cycle with GT1.[40] The revised limit of 0.10 is lb/MMbtu achievable when ST1 is operated in combined cycle with GT1 and is consistent with the use of natural gas, which ADEQ previously determined to constitute BART for this unit. Therefore, we propose to find that this

[39] See Memorandum from Lydia Wegman and Peter Tsirigotis, 2002 Base Year Emission Inventory SIP Planning: 8-hr Ozone, PM2.5, and Regional Haze Programs, November 8, 2002. http://www.epa.gov/ttn/oarpg/t1/memoranda/2002bye—gm.pdf.

[40] See letter from Eric Hiser, Jorden, Bischoff and Hiser, to Eric Massey, ADEQ (November 25, 2013).

revision to the emission limit for ST1, when operated in combined cycle mode with GT1, is consistent with the provisions of 40 CFR 51.308(e) requiring SIPs to contain emission limits representing BART.

D. EPA's Evaluation of Other Applicable Requirements

1. Enforceable Emission Limits

CAA section 110(a)(2)(A) requires SIPs to include enforceable emissions limitations necessary or appropriate to meet the applicable requirements of the Act. In addition, SIPs must contain regulatory requirements related to monitoring, recordkeeping, and reporting for applicable emissions limitations.[41] The Apache Permit Revision includes such enforceable emission limits, as well as associated monitoring, recordkeeping, and reporting requirements, for all units and pollutants. Therefore, we propose to find that the Apache SIP Revision meets the requirements of the CAA and EPA's implementing regulations for enforceable emission limitations.

2. Non-interference with Applicable Requirements

The CAA requires that any revision to an implementation plan shall not be approved by the Administrator if the revision would interfere with any applicable requirement concerning attainment and reasonable further progress or any other applicable requirement of the Act.[42] EPA has promulgated health-based standards, known as the national ambient air quality standards (NAAQS), for seven pollutants, including SO_2, PM_{10}, NO_2 (a component of NO_X), and pollutants such as ozone and $PM_{2.5}$ that are formed in the atmosphere from reactions between NO_X and other pollutants. Using a process that considers air quality data and other factors, EPA designates areas as "nonattainment" if those areas cause or contribute to violations of a NAAQS. Reasonable

[41] See, e.g. CAA section 110(a)(2)(F) and 40 CFR 51.212(c).
[42] CAA Section 110(l), 42 U.S.C. 7410(l).

further progress, as defined in section 171 of the CAA, is related to attainment and means annual incremental reductions in emissions of the relevant air pollutant for the purpose of ensuring attainment of the applicable NAAQS. Apache is located in north central Cochise County, Arizona, which is designated as Unclassifiable/Attainment for all of the NAAQS.[43] Therefore, we propose to find that a revision to the BART emission limits for NO_X will not interfere with attainment or reasonable further progress for any air quality standard.

The other requirements of the CAA that are applicable to Apache are:

- Standards of Performance for New Stationary Sources (NSPS), 40 CFR part 60, subpart D;
- National Emission Standards for Hazardous Air Pollutants (NESHAP), 40 CFR part 63, subpart UUUUU;
- Compliance Assurance Monitoring (CAM), 40 CFR part 64; and
- BART and other visibility protection requirements under CAA section 169A and 40 CFR Part 52, subpart P.

Today's proposed revisions would not affect the applicable requirements of the NESHAP, NSPS or CAM. Furthermore, as noted by ADEQ, a switch from coal to gas at ST2 will result in significant reductions in hazardous air pollutants.[44] Therefore, we propose to find that these revisions would not interfere with these requirements.

The proposed revisions would alter the applicable emission limits for NO_X, SO_2 and PM_{10} at Apache under CAA section 169A and 40 CFR 51.308(e). However, as explained above, the visibility improvement expected to result from the Apache BART Alternative for ST2 and ST3 is expected to result in greater visibility improvement on average across all affected Class I areas compared with BART. In addition, while there will be an increase in the NO_X limit for ST1 when

[43] Apache SIP Revision, pages 9-10, Table 1.5.
[44] Id. page 12.

operating in combined-cycle mode with GT1, from 0.056 lb/MMbtu to 0.10 lb/MMbtu, the addition of a lb/day limit will ensure that there will not be an increase in overall emissions from this unit.[45] Therefore, we propose to find that the Apache SIP Revision would not interfere with any applicable requirement of the CAA.

IV. EPA's Proposed Action

For the reasons described above, EPA proposes to approve the Apache SIP Revision and withdraw the provisions of the Arizona Regional Haze FIP that apply to Apache. We also propose to find that withdrawal of the FIP would constitute our action on AEPCO's Petition for Reconsideration of the FIP.

V. Statutory and Executive Order Reviews

A. Executive Order 12866: Regulatory Planning and Review and Executive Order 13563: Improving Regulation and Regulatory Review 13563

This proposed action is not a "significant regulatory action" under the terms of Executive Order 12866 (58 FR 51735, October 4, 1993) and is therefore not subject to review under Executive Orders 12866 and 13563 (76 FR 3821, January 21, 2011). This proposed rule applies to only one facility and is therefore not a rule of general applicability.

B. Paperwork Reduction Act

This action does not impose an information collection burden under the provisions of the Paperwork Reduction Act, 44 U.S.C. 3501 et seq. Burden is defined at 5 CFR 1320.3(b).

C. Regulatory Flexibility Act

The Regulatory Flexibility Act (RFA) generally requires an agency to prepare a regulatory

[45] Id. page 11, footnote 9.

flexibility analysis of any rule subject to notice and comment rulemaking requirements under the Administrative Procedure Act or any other statute unless the agency certifies that the rule will not have a significant economic impact on a substantial number of small entities. Small entities include small businesses, small organizations, and small governmental jurisdictions.

For purposes of assessing the impacts of today's proposed rule on small entities, small entity is defined as: (1) A small business as defined by the Small Business Administration's (SBA) regulations at 13 CFR 121.201; (2) a small governmental jurisdiction that is a government of a city, county, town, school district or special district with a population of less than 50,000; and (3) a small organization that is any not-for-profit enterprise which is independently owned and operated and is not dominant in its field. Firms primarily engaged in the generation, transmission, and/or distribution of electric energy for sale are small if, including affiliates, the total electric output for the preceding fiscal year did not exceed 4 million megawatt hours. AEPCO sold under 3 million megawatt hours in 2013 and is therefore a small entity.[46]

After considering the economic impacts of this proposed action on small entities, I certify that this proposed action will not have a significant economic impact on a substantial number of small entities. The proposed approval of the SIP, if finalized, merely approves state law as meeting Federal requirements and imposes no additional requirements beyond those imposed by state law. See *Mid-Tex Electric Cooperative, Inc. v. FERC*, 773 F.2d 327 (D.C. Cir. 1985). The proposed FIP withdrawal would alleviate economic impacts on AEPCO and therefore would not have a significant adverse impact on any small entity.

D. Unfunded Mandates Reform Act (UMRA)

Title II of the Unfunded Mandates Reform Act of 1995 (UMRA), 2 U.S.C. 1531-1538,

[46] Arizona's G&T Cooperatives Annual Report (2013), page 17.

requires Federal agencies, unless otherwise prohibited by law, to assess the effects of their regulatory actions on State, local, and tribal governments and the private sector. Federal agencies must also develop a plan to provide notice to small governments that might be significantly or uniquely affected by any regulatory requirements. The plan must enable officials of affected small governments to have meaningful and timely input in the development of EPA regulatory proposals with significant Federal intergovernmental mandates and must inform, educate, and advise small governments on compliance with the regulatory requirements.

This proposed rule does not contain a Federal mandate that may result in expenditures of $100 million or more for state, local, and tribal governments, in the aggregate, or the private sector in any one year. Thus, this rule is not subject to the requirements of sections 202 or 205 of UMRA.

This proposed rule is also not subject to the requirements of section 203 of UMRA because it contains no regulatory requirements that might significantly or uniquely affect small governments. This proposed rule does not impose regulatory requirements on any government entity.

E. Executive Order 13132: Federalism

This action does not have federalism implications. It will not have substantial direct effects on the states, on the relationship between the national government and the states, or in the distribution of power and responsibilities among the various levels of government, as specified in Executive Order 13132.

In the spirit of Executive Order 13132, and consistent with EPA policy to promote communications between EPA and State and local governments, EPA specifically solicits comment on this proposed action from State and local officials.

F. Executive Order 13175: Consultation and Coordination with Indian Tribal Governments

Under Executive Order 13175 (65 FR 67249, November 9, 2000), EPA may not issue a regulation that has tribal implications, that imposes substantial direct compliance costs, and that is not required by statute, unless the federal government provides the funds necessary to pay the direct compliance costs incurred by tribal governments, or EPA consults with tribal officials early in the process of developing the proposed regulation and develops a tribal summary impact statement.

This proposed rule does not have tribal implications, as specified in Executive Order 13175. It will not have substantial direct effects on tribal governments. Thus, Executive Order 13175 does not apply to this rule. EPA specifically solicits additional comment on this proposed rule from tribal officials.

G. Executive Order 13045: Protection of Children From Environmental Health Risks and Safety Risks

EPA interprets EO 13045 (62 FR 19885, April 23, 1997) as applying only to those regulatory actions that concern health or safety risks, such that the analysis required under section 5-501 of the EO has the potential to influence the regulation. This action is not subject to EO 13045 because it does not establish an environmental standard intended to mitigate health or safety risks. This proposed action addresses regional haze and visibility protection.

H. Executive Order 13211: Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use

This action is not subject to Executive Order 13211 (66 FR 28355 (May 22, 2001)), because it is exempt under Executive Order 12866.

I. National Technology Transfer and Advancement Act

Section 12(d) of the National Technology Transfer and Advancement Act of 1995 (NTTAA), Pub L. No. 104-113, 12 (10) (15 U.S.C. 272 note) directs EPA to use voluntary consensus standards (VCS) in its regulatory activities unless to do so would be inconsistent with applicable law or otherwise impractical. VCS are technical standards (e.g., materials specifications, test methods, sampling procedures and business practices) that are developed or adopted by the VCS bodies. The NTTAA directs EPA to provide Congress, through annual reports to OMB, with explanations when the Agency decides not to use available and applicable VCS.

EPA believes that VCS are inapplicable to this action. Today's action does not require the public to perform activities conducive to the use of VCS.

J. Executive Order 12898: Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations

Executive Order 12898 (59 FR 7629, February 16, 1994), establishes federal executive policy on environmental justice. Its main provision directs federal agencies, to the greatest extent practicable and permitted by law, to make environmental justice part of their mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of their programs, policies, and activities on minority populations and low-income populations in the United States.

EPA has determined that this proposed rule will not have disproportionately high and adverse human health or environmental effects on minority or low-income populations because it increases the level of environmental protection for all affected populations without having any disproportionately high and adverse human health or environmental effects on any population, including any minority or low-income population, at a lower cost than the FIP.

List of Subjects in 40 CFR Part 52

Environmental protection, Air pollution control, Incorporation by reference, Intergovernmental relations, Nitrogen dioxide, Particulate matter, Reporting and recordkeeping requirements, Sulfur dioxide, Visibility.

AUTHORITY: 42 U.S.C. 7401 et seq.

Dated: September 5, 2014.

Jared Blumenfeld,
Regional Administrator,
EPA Region IX.

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